

PTO/SB/08b (01-08)

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<b>Substitute for form 1449/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			<b>Complete If Known</b>		
			Application Number	10/731,170 Conf #5045	
			Filing Date	December 10, 2003	
			First Named Inventor	Yong Cheol PARK	
			Art Unit	2627	
			Examiner Name	Gupta, Parul H.	
Sheet	1	of	9	Attorney Docket Number	0465-1110P

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA*	US-2001/0009537-A1	07-26-2001	Park	
	AB*	US-2001/0011267-A1	08-02-2001	Kihara et al.	
	AC*	US-2001/0026511-A1	10-04-2001	Ueda et al.	
	AD*	US-2001/0043525-A1	11-22-2001	Ito et al.	
	AE*	US-2002/0025138-A1	02-28-2002	Isobe et al.	
	AF*	US-2002/0097665-A1	07-25-2002	Ko et al.	
	AG*	US-2002/0097666-A1	07-25-2002	Ko et al.	
	AH*	US-2002/0099950-A1	07-25-2002	Smith	
	AI*	US-2002/0136118-A1	09-26-2002	Takahashi	
	AJ*	US-2002/0136134-A1	09-26-2002	Ito et al.	
	AK*	US-2002/0136537-A1	09-26-2002	Takahashi	
	AL*	US-2002/0159382-A1	10-31-2002	Ohata et al.	
	AM*	US-2002/0161774-A1	10-31-2002	Tol et al.	
	AN*	US-2002/0176341-A1	11-28-2002	Ko et al.	
	AO*	US-2003/0072236-A1	04-17-2003	Hirotsune et al.	
	AP*	US-2003/0095482-A1	05-22-2003	Hung et al.	
	AQ*	US-2003/0126527-A1	07-03-2003	Kim et al.	
	AR*	US-2003/0135800-A1	07-17-2003	Kim et al.	
	AS*	US-2003/0137909-A1	07-24-2003	Ito et al.	
	AT*	US-2003/0137910-A1	07-24-2003	Ueda et al.	
	AU*	US-2003/0142608-A1	07-31-2003	Yamamoto et al.	
	AV*	US-2003/0149918-A1	08-07-2003	Takaichi	
	AW*	US-2003/0173669-A1	09-18-2003	Shau	
	AX*	US-2003/0198155-A1	10-23-2003	Go et al.	
	AY*	US-2004/0001408-A1	01-01-2004	Propps et al.	
	AZ*	US-2004/0004917-A1	01-08-2004	Lee	
	AA1*	US-2004/0062159-A1	04-01-2004	Park et al.	
	AB1*	US-2004/0062160-A1	04-01-2004	Park et al.	
	AC1*	US-2004/0105363-A1	06-03-2004	Ko et al.	

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U.S. PATENT DOCUMENTS					
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		Number-Kind Code <sup>2</sup> (if known)			
	AD1*	US-2004/0114474-A1	06-17-2004	Park et al.	
	AE1*	US-2004/0120233-A1	06-24-2004	Park et al.	
	AF1*	US-2004/0125716-A1	07-01-2004	Ko et al.	
	AG1*	US-2004/0125717-A1	07-01-2004	Ko et al.	
	AH1*	US-2004/0136292-A1	07-15-2004	Park et al.	
	AI1*	US-2004/0145980-A1	07-29-2004	Park et al.	
	AJ1*	US-2004/0158768-A1	08-12-2004	Park et al.	
	AK1*	US-2004/0174782-A1	09-09-2004	Lee et al.	
	AL1*	US-2004/0174785-A1	09-09-2004	Ueda et al.	
	AM1*	US-2004/0179445-A1	09-16-2004	Park et al.	
	AN1*	US-2004/0179458-A1	09-16-2004	Hwang et al.	
	AO1*	US-2004/0223427-A1	11-11-2004	Kim et al.	
	AP1*	US-2004/0246851-A1	12-09-2004	Hwang et al.	
	AQ1*	US-2005/0007910-A1	01-13-2005	Ito et al.	
	AR1*	US-2005/0025007-A1	02-03-2005	Park	
	AS1*	US-2005/0052972-A1	03-10-2005	Park	
	AT1*	US-2005/0052973-A1	03-10-2005	Park	
	AU1*	US-2005/0055500-A1	03-10-2005	Park	
	AV1*	US-2005/0060489-A1	03-17-2005	Park	
	AW1*	US-2005/0068877-A1	03-31-2005	Yeo	
	AX1*	US-2005/0083740-A1	04-21-2005	Kobayashi	
	AY1*	US-2005/0083830-A1	04-21-2005	Martens et al.	
	AZ1*	US-2005/0195716-A1	09-08-2005	Ko et al.	
	AA2*	US-2005/0289389-A1	12-29-2005	Yamagami et al.	
	AB2*	US-2006/0077827-A1	04-13-2006	Takahashi	
	AC2*	US-2006/0195719-A1	08-31-2006	Ueda et al.	

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		Number-Kind Code <sup>2</sup> (if known)			
	AD2*	US-2006/0203635-A1	09-14-2006	Ko et al.	
	AE2*	US-2006/0203638-A1	09-14-2006	Ko et al.	
	AF2*	US-2006/0203684-A1	09-14-2006	Ko et al.	
	AG2*	US-2006/0227694-A1	10-12-2006	Woerlee et al.	
	AH2*	US-2007/0294571-A1	12-20-2007	Park et al.	
	AI2*	US-2008/0046780-A1	02-21-2008	Shibuya et al.	
	AJ2*	US-4,733,386	03-22-1988	Shimoi et al.	
	AK2*	US-4,807,205	02-21-1989	Picard et al.	
	AL2*	US-5,210,734-A	05-11-1993	Sakurai et al.	
	AM2*	US-5,235,585-A	08-10-1993	Bish et al.	
	AN2*	US-5,237,553-A	08-17-1993	Fukushima et al.	
	AO2*	US-5,247,494-A	09-21-1993	Ohno et al.	
	AP2*	US-5,319,626	06-07-1994	Ozaki et al.	
	AQ2*	US-5,404,357-A	04-04-1995	Ito et al.	
	AR2*	US-5,442,611-A	08-15-1995	Hosaka et al.	
	AS2*	US-5,475,820-A	12-12-1995	Natrsevski et al.	
	AT2*	US-5,481,519-A	01-02-1996	Hosoya et al.	
	AU2*	US-5,495,466-A	02-27-1996	Dohmeier et al.	
	AV2*	US-5,528,571-A	06-18-1996	Funahashi et al.	
	AW2*	US-5,553,045-A	09-03-1996	Obata et al.	
	AX2*	US-5,577,194-A	11-19-1996	Wells et al.	
	AY2*	US-5,608,715	03-04-1997	Yokogawa et al.	
	AZ2*	US-5,715,221-A	02-03-1998	Ito et al.	
	AA3*	US-5,720,030-A	02-17-1998	Kamihara et al.	
	AB3*	US-5,740,435-A	04-14-1998	Yamamoto et al.	
	AC3*	US-5,745,444-A	04-28-1998	Ichikawa et al.	
	AD3*	US-5,799,212-A	08-25-1998	Ohmori et al.	
	AE3*	US-5,802,028-A	09-01-1998	Igarashi et al.	
	AF3*	US-5,805,536-A	09-08-1998	Gage et al.	
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	AH3*	US-5,867,455-A	02-02-1999	Miyamoto et al.	

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		Number-Kind Code <sup>2</sup> (if known)			
	AI3*	US-5,914,928-A	06-22-1999	Takahashi et al.	
	AJ3*	US-6,058,085-A	05-02-2000	Obata et al.	
	AK3*	US-6,118,608-A	09-12-2000	Kakihara et al.	
	AL3*	US-6,138,203-A	10-24-2000	Inokuchi et al.	
	AM3*	US-6,160,778-A	12-12-2000	Ito et al.	
	AN3*	US-6,189,118-B1	02-13-2001	Sasaki et al.	
	AO3*	US-6,233,654-B1	05-15-2001	Aoki et al.	
	AP3*	US-6,341,109-B1	01-22-2002	Kayanuma et al.	
	AQ3*	US-6,341,278-B1	01-22-2002	Yamamoto et al.	
	AR3*	US-6,405,332-B1	06-11-2002	Bando et al.	
	AS3*	US-6,414,923-B1	07-02-2002	Park et al.	
	AT3*	US-6,447,126-B1	09-10-2002	Hornbeck	
	AU3*	US-6,469,978-B1	10-22-2002	Ohata et al.	
	AV3*	US-6,477,126-B1	11-05-2002	Park et al.	
	AW3*	US-6,480,446-B1	11-12-2002	Ko et al.	
	AX3*	US-6,529,458-B1	03-04-2003	Shin et al.	
	AY3*	US-6,564,345-B1	05-13-2003	Kim et al.	
	AZ3*	US-6,581,167-B1	06-17-2003	Gotoh et al.	
	AA4*	US-6,606,285-B1	08-12-2003	Ijtsma et al.	
	AB4*	US-6,615,363-B1	09-02-2003	Fukasawa et al.	
	AC4*	US-6,631,106-B1	10-07-2003	Numata et al.	
	AD4*	US-6,633,724-B1	10-14-2003	Hasegawa et al.	
	AE4*	US-6,667,939-B1	12-23-2003	Miyamoto et al.	
	AF4*	US-6,671,249-B2	12-30-2003	Horie et al.	
	AG4*	US-6,697,306-B2	02-24-2004	Sako et al.	
	AH4*	US-6,724,701-B2	04-20-2004	Ijtsma et al.	
	AI4*	US-6,738,341-B2	05-18-2004	Ohata et al.	
	AJ4*	US-6,754,860-B2	06-22-2004	Kim et al.	
	AK4*	US-6,760,288-B2	07-06-2004	Ijtsma et al.	
	AL4*	US-6,763,429-B1	07-13-2004	Hirayama et al.	
	AM4*	US-6,795,389-B1	09-21-2004	Nishiuchi et al.	

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	AN4*	US-6,804,797-B2	10-12-2004	Ko et al.	
	AO4*	US-6,826,140-B2	11-30-2004	Brommer et al.	
	AP4*	US-6,842,580-B1	01-11-2005	Ueda et al.	
	AQ4*	US-6,883,111-B2	04-19-2005	Yoshida et al.	
	AR4*	US-6,918,003-B2	07-12-2005	Sasaki et al.	
	AS4*	US-6,934,236-B2	08-23-2005	Lee et al.	
	AT4*	US-6,999,398-B2	02-14-2006	Yamamoto et al.	
	AU4*	US-7,002,882-B2	02-21-2006	Takahashi et al.	
	AV4*	US-7,027,059-B2	04-11-2006	Hux et al.	
	AW4*	US-7,027,373-B2	04-11-2006	Ueda et al.	
	AX4*	US-7,042,825-B2	05-09-2006	Yamamoto et al.	
	AY4*	US-7,050,701-B1	05-23-2006	Sasaki et al.	
	AZ4*	US-7,092,334-B2	08-15-2006	Choi et al.	
	AA5*	US-7,149,930-B2	12-12-2006	Ogawa et al.	
	AB5*	US-7,184,377-B2	02-27-2007	Ito et al.	
	AC5*	US-7,188,271-B2	03-06-2007	Park et al.	
	AD5*	US-7,233,550-B2	06-19-2007	Park et al.	
	AE5*	US-7,272,086-B2	09-18-2007	Hwang et al.	
	AF5*	US-7,289,404-B2	10-30-2007	Park et al.	
	AG5*	US-7,296,178-B2	11-13-2007	Yoshida et al.	
	AH5*	US-7,327,654-B2	02-05-2008	Hwang et al.	
	AI5*	US-5,940,702-A	08-17-1999	Sakao et al.	
	AJ5*	US-6,785,206-B1	08-31-2004	Lee et al.	
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	AL5*	US-6,542,450-B1	04-01-2003	Park et al.	
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		Country Code <sup>2</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			
	BA	CN-1134017-A	10-23-1996	Sony Corp		ABS
	BB	CN-1140897-C	01-22-1997	Nippon Electric Co		ABS
	BC	CN-1227950-A	09-08-1999	LG Electronics Inc		ABS
	BD	CN-1273419-A	11-15-2000	Samsung Electronics Co Ltd		ABS
	BE	CN-1675708-A	09-28-2005	Samsung Electronics Co Ltd		ABS
	BF	DE-199 54 054-A1	06-21-2000	LG Electronics Inc		ABS
	BG	EP-0314186-A2	05-03-1989	Matsushita Electric Ind Co Ltd		
	BH	EP-0350920-A2	01-17-1990	Matsushita Electric Ind Co Ltd		
	BI	EP-0464811-A2	01-08-1992	Matsushita Electric Ind Co Ltd		
	BJ	EP-0472484-A2	02-26-1992	Ibm		
	BK	EP-0477503-A2	04-01-1992	Fuji Photo Film Co Ltd		
	BL	EP-0556046-A1	08-18-1993	Sony Corp		
	BM	EP-0871172-A2	10-14-1998	Sony Corp		
	BN	EP-0974967-A1	01-26-2000	Fujitsu Ltd et al.		
	BO	EP-0989554-A1	03-29-2000	Sony Corp		
	BP	EP-0997904-A1	05-03-2000	Matsushita Electric Ind Co Ltd		
	BQ	EP-1026681-B1	08-09-2000	Matsushita Electric Ind Co Ltd		
	BR	EP-1132914-A2	09-12-2001	Matsushita Electric Ind Co Ltd		
	BS	EP-1148493-A2	10-24-2001	Samsung Electronics Co Ltd		
	BT	EP-1152414-A2	11-07-2001	Matsushita Electric Ind Co Ltd		
	BU	EP-1239478-A1	09-11-2002	Matsushita Electric Ind Co Ltd		
	BV	EP-1274081-A2	01-08-2003	Nippon Electric Co		
	BW	EP-1298659-A1	04-02-2003	Samsung Electronics Co Ltd		
	BX	EP-1329888-A1	07-23-2003	Matsushita Electric Ind Co Ltd		
	BY	EP-1347452-A2	09-24-2003	Matsushita Electric Ind Co Ltd		
	BZ	EP-1547065-A0	06-25-2005	LG Electronics Inc		

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		Filing Date	December 10, 2003		
		First Named Inventor	Yong Cheol PARK		
		Art Unit	2627		
		Examiner Name	Gupta, Parul H.		
Sheet	7	of	9	Attorney Docket Number	0465-1110P

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>o</sup>
		Country Code <sup>2</sup> -Number <sup>3</sup> -Kind Code <sup>4</sup> (if known)				
	BA1	EP-1573723-A0	09-14-2005	LG Electronics Inc		
	BB1	EP-1623422-A0	02-08-2006	LG Electronics Inc		
	BC1	GB-2356735-A	05-30-2001	Mitsubishi Electric Corp		
	BD1	JP-10-050005-A	02-20-1998	Nec Gumma Ltd		ABS
	BE1	JP-10-050032-A	02-20-1998	Sony Corp		ABS
	BF1	JP-10-187356	07-14-1998	Tokyo Shibaura Electric Co		ABS
	BG1	JP-10-187357	07-14-1998	Nippon Electric Eng		ABS
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	BJ1	JP-10-187360	07-14-1998	Tec Corp		ABS
	BK1	JP-10-187361-A1	07-14-1998	Hitachi Koki Kk		ABS
	BL1	JP-11-110888-A	04-23-1999	Nippon Kogaku Kk		ABS
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	BN1	JP-01-263955-A	10-20-1989	Matsushita Electric Ind Co Ltd		ABS
	BO1	JP-2000-090588-A	03-31-2000	LG Electronics Inc		ABS
	BP1	JP-2000-149449-A	05-30-2000	LG Electronics Inc		ABS
	BQ1	JP-2000-195178-A	07-14-2000	Matsushita Electric Ind Co Ltd		ABS
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	BS1	JP-2000-285607-A	10-13-2000	Tokyo Shibaura Electric Co		ABS
	BT1	JP-2001-023317-A	01-26-2001	Nippon Electric Co		ABS
	BU1	JP-2001-069440-A	03-16-2001	Sanyo Electric Co		ABS
	BV1	JP-2001-110168-A	04-20-2001	Ricoh Kk		ABS
	BW1	JP-2001-351334-A	12-21-2001	Sony Corp		ABS
	BX1	JP-2001-357623-A	12-26-2001	Victor Company Of Japan		ABS
	BY1	JP-2002-015507-A	01-18-2002	Sony Corp		ABS
	BZ1	JP-2002-015525-A	01-18-2002	Fujitsu Ltd et al.		ABS
	BA2	JP-2002-056619-A	02-22-2002	Sony Corp		ABS
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	BE2	JP-2002-329321-A	11-15-2002	Sony Corp		ABS
	BF2	JP-2002-352522-A	12-06-2002	Matsushita Electric Ind Co Ltd		ABS

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			First Named Inventor	Yong Cheol PARK	
			Art Unit	2627	
			Examiner Name	Gupta, Parul H.	
Sheet	8	of	9	Attorney Docket Number	0465-1110P

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BG2	JP-2003-536194-A	12-02-2003			ABS
	BH2	JP-2004-280864-A	10-07-2004	Sony Corp		ABS
	BI2	JP-2004-280865-A	10-07-2004	Sony Corp		ABS
	BJ2	JP-2005-535993-A	11-24-2005			ABS
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	BL2	JP-2005-538491-A	12-15-2005			ABS
	BM2	JP-2006-519445-A	08-24-2006			ABS
	BN2	JP-02-023417-A	01-25-1990	Yoshihisa et al.		ABS
	BO2	JP-05-274814-A	10-22-1993			ABS
	BP2	JP-63-091842-A	04-22-1988	Matsushita Electric Ind Co Ltd		ABS
	BQ2	JP-06-349201-A	12-22-1994	Matsushita Electric Ind Co Ltd		ABS
	BR2	JP-08-096522-A	04-12-1996	Sony Corp		ABS
	BS2	JP-09-145634-A	06-06-1997	Sony Corp		ABS
	BT2	JP-09-231053-A	09-05-1997	Nec Software Ltd		ABS
	BU2	KR-1020040094301-A	11-09-2004			ABS
	BV2	WO-2004/015708-A1	02-19-2004	Samsung Electronics Co Ltd		
	BW2	WO-2004/081926-A1	09-23-2004	Samsung Electronics Co Ltd		
	BX2	TW-371752	10-11-1999			ABS
	BY2	TW-413805	12-01-2000			ABS
	BZ2	WO-00/54274-A1	09-14-2000	Matsushita Electric Ind Co Ltd		
	BA3	WO-01/22416-A1	03-29-2001	Koninkl Philips Electronics Nv		
	BB3	WO-01/93035-A2	12-06-2001	Dataplay Inc		
	BC3	WO-03/007296-A1	01-23-2003	Ciba Sc Holding Ag et al.		
	BD3	WO-03/025924-A1	03-27-2003	Tdk Corp et al.		
	BE3	WO-03/079353-A1	09-25-2003	Matsushita Electric Ind Co Ltd		
	BF3	WO-2004/015707-A1	02-19-2004	Samsung Electronics Co Ltd et al.		
	BG3	WO-2004/015180	09-02-2004	LG Electronics inc		
	BH3	WO-2004/029668-A2	04-08-2004	LG Electronics Inc		
	BI3	WO-2004/029941-A1	04-08-2004	LG Electronics Inc		
	BJ3	WO-2004/034396-A1	04-22-2004	Samsung Electronics Co Ltd		
	BK3	WO-2004/036561-A1	04-29-2004	Samsung Electronics Co Ltd		

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			First Named Inventor	Yong Cheol PARK	
			Art Unit	2627	
			Examiner Name	Gupta, Parul H.	
Sheet	9	of	9	Attorney Docket Number	0465-1110P

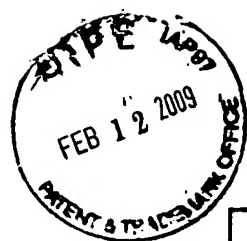
FOREIGN PATENT DOCUMENTS						
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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BL3	WO-2004/053872-A1	06-24-2004	LG Electronics Inc		
	BM3	WO-2004/053874-A1	06-24-2004	LG Electronics Inc		
	BN3	WO-2004/068476-A1	08-12-2004	LG Electronics Inc		
	BO3	WO-2004/079740-A1	09-16-2004	LG Electronics Inc		
	BP3	WO-2004/093035-A1	10-28-2004	Ds Enterprise Inc et al.		
	BQ3	WO-2004/100155-A1	11-18-2004	LG Electronics Inc et al.		
	BR3	WO-2004/100156-A1	11-18-2004	LG Electronics Inc et al.		
	BS3	WO-2005/004123-A1	01-13-2005	LG Electronics Inc et al.		
	BT3	WO-84/00628-A1	02-16-1984	Western Electric Co		
	BU3	WO-96/30902-A1	10-03-1996	Ibm et al.		
	BV3	WO-97/22182-A1	06-19-1997	Matsushita Electric Ind Co Ltd et al.		
	BW3	RU-2005 103 626	09-10-2005			
	BX3	RU-2005 127 337	02-10-2006			
	BY3	WO-2004/025648-A1	03-25-2004	Samsung Electronics Co., Ltd		
	BZ3	WO-2004/025649-A1	03-25-2004	Samsung Electronics Co., Ltd		
	BA4	WO-2004/075180-A1	09-02-2004	LG Electronics Inc.		
	BB4	WO-2004/079631-A2	09-16-2004	Koninklijke Philips Electronics		

NON PATENT LITERATURE DOCUMENTS			
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	CA	JIS handbook data processing for hardware, Japan, Japanese Standards Association Inc., April 21, 1999, Pages 1064-1070	

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			Examiner Name	P. H. Gupta	
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	AA*	US-4,963,866	10-16-1990	Duncan	
	AB*	US-2005/0207262-A1	09-22-2005	Terada et al.	
	AC*	US-2005/0008346-A1	01-13-2005	Noguchi et al.	
	AD*	US-4,558,446	12-10-1985	Banba et al.	
	AE*	US-7,161,879-B2	01-09-2007	Hwang et al.	
	AF*	US-7,236,687-B2	06-26-2007	Kato et al.	
	AG*	US-5,878,020-A	03-02-1999	Takahashi	

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BA	JP-2005-004912-A	06-01-2005			✓

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			First Named Inventor	Yong Cheol PARK	
			Art Unit	2627	
			Examiner Name	P. H. Gupta	
Sheet	1	of	1	Attorney Docket Number	0465-1110P

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		Country Code <sup>3</sup>	Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BA	WO-2004/086379		10-07-2004			✓
	BB	WO-2004/015707-A1		02-19-2004	Samsung Electronics Co Ltd et al.		✓

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